REMARKS

The Examiner alleges that he is unable to discern the residence of the inventor which was incorrectly entered on the bibliographic data sheet by the USPTO despite being correctly supplied in the Declaration in compliance with 37 C.F.R. § 1.63(c)(1). Applicant submits that the Official Filing Receipt also reflects Kanagawa-ken, Japan, rather than Kaisei-machi, Japan, as the inventor's residence. In order to correct these errors, Applicant is submitting herewith a Supplemental Application Data Sheet to correct the bibliographic data, and a Request for Corrected Official Filing Receipt to correct the Official Filing Receipt.

Claim Rejections

Claims 1-3 and 7 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Pat. Pub. 2003/0042445 A1 to Mitchell *et al.* ("Mitchell"). Claim 7 has been canceled without prejudice or disclaimer. Applicant traverses the rejections of claims 1-3.

The invention of the present application comprises the imaging optical system denoted by reference numeral 31 in the FIG. 2. The focusing optical system is provide to condense the stimulated emission generated by the radiation imaging panel denoted by 10 in FIG. 2. In order to condense as much stimulated emission as possible, it is necessary to collect light that enters the imaging optical system 31 with a great angular aperture, i.e., decrease the distance between the imaging optical system 31 and the radiation imaging panel 10. That is, it is necessary to increase the numerical aperture of the imaging optical system. The angular aperture at the object side of the imaging optical system is the same as that at the imaging side thereof. Therefore, the distance from the radiation imaging panel 10 to the imaging optical system 31 and the distance from the imaging optical system 31 to the line sensor 32 are equal. Accordingly, it is necessary

to decrease the distance between the radiation imaging panel 10 and the line sensor 32 in order to collect more stimulated emission.

Applicant's filters are provided between the radiation imaging panel 10 and the line senor 32. As the distance between the radiation image panel 10 and the line sensor 32 becomes smaller, it is necessary for the thickness of the filters provided therebetween to decrease. However, if the thickness of the filter is decreased, the light shielding properties of the filter deteriorate, and light of wavelengths not intended to reach the line sensor are detected as a noise signal. If the thickness of the filter is increased in order to secure sufficient light shielding properties, however, the distance between the radiation imaging panel 10 and the line sensor 32 increases, thereby decreasing the angular aperture, which in turn decreases the amount of stimulated emission that can be collected.

Applicant's invention, on the other hand, enables both the light collecting efficiency of the imaging optical system 31 and the light shielding properties of the filters to be maintained. That is, in the case that predetermined filtering properties are to be obtained, the use of a filter comprising a plurality of filter members enables the filter to be thinner than that of a filter comprising a single filter member. This is because attenuation of light due to surface reflection occurs more conspicuously in a filter comprising a plurality of filter members.

The Mitchell reference is silent regarding the thickness of filters, and does not disclose or suggest providing a filter which is divided into a plurality of filter elements. Therefore, it would not have been obvious to one of ordinary skill in the art to modify the reference as attempted by the Examiner. Even if the reference had been modified, the modification would not have resulted in the invention as set forth and arranged in the claims.

For at least the above reasons, amended claim 1 is patentable over Mitchell. Claims 2 and 3, which depend from claim 1, are patentable at least by virtue of their dependency.

Claims 5, 6 and 8 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 4,896,043 to Arakawa *et al.* ("Arakawa I") in view of U.S. Patent No. 5,596,202 to Arakawa ("Arakawa II"). Applicant traverses these rejections.

The combination of Arakawa I and Arakawa II does not disclose or suggest at least a longer wavelength light cut filter which transmits the stimulating light and the stimulated emission and attenuates the intensity of the light components longer in wavelength than the stimulating light is provided on the side of the radiation image convertor panel from which the stimulated emission emitted from the radiation image convertor panel is detected. Also, both Arakawa I and Arakawa II are silent about filter processing for light which has a wavelength longer than the stimulating light since only characteristics for light having wavelengths less than 700 nm are indicated in Fig. 2 of Arakawa I, and characteristics for light having wavelengths less than 750 nm are indicated in Fig. 4 of Arakawa II.

As illustrated in Fig. 1 and described at column 4, lines 19-31 of Arakawa I, the multilayer optical filter 1 is reflective for light of the stimulation wavelength and transmissive for light of the stimulated emission wavelength. Therefore, irradiation of stimulating rays for the phosphor layer is carried out from the side of the multilayer optical filter 1 opposite to the side that allows the stimulated emission wavelength to be transmitted. By irradiating from the opposite side, the stimulation wavelength is reflected while the stimulated emission wavelength is transmitted.

As correctly asserted by the Examiner, Arakawa II discloses a panel that is irradiated by stimulating rays from the same side of the panel as the stimulated emissions are emitted. However, in rebuttal to the Examiner's argument that the purpose of the reflectivity of filter 1 in the panel of Arakawa I is for an increased chance of stimulating rays stimulating an emission, if the invention of Arakawa II were modified to use the optical film of Arakawa I, which is reflective for stimulating light wavelengths, when irradiated from the filter side the phosphor layer would not be activated since the stimulating wavelength would be reflected away from the phosphor layer. With no stimulating wavelengths impinging upon the phosphor layer, no stimulated emission would occur.

Since the Examiner's proposed modification would render the prior art invention unsatisfactory for its intended purpose, and further, since there is no reasonable expectation of successful operation if the modification is made, there is no suggestion or motivation to make the proposed modification. Therefore, claim 5 is patentable over the combination of Arakawa I and Arakawa II. Also, since independent claim 5 is patentable, dependent claim 6 is patentable at least by virtue of its dependency on claim 5.

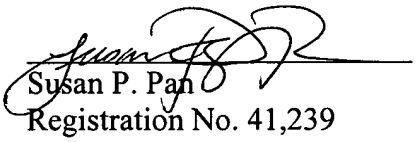
Claims 1 and 4 have been provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 2 of co-pending U.S. Application No. 10/391,272 to Yasuda in view of Mitchell. Since this a provisional obviousness-type double patenting rejection, Applicant exercises the option to hold in abeyance a response to the obviousness-type double patenting rejection until a patent issues from one of the pending applications.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Susan P. Pan
Registration No. 41,239

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE
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